



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Aw

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,137	03/14/2001	William P. Moore	BU9-98-050DIV2	3995
21254	7590	11/10/2003		
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			EXAMINER THOMPSON, ANNETTE M	
			ART UNIT 2825	PAPER NUMBER

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/805,137

Applicant(s)

MOORE ET AL.

Examiner

A. M. Thompson

Art Unit

2825

Am

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,7,8,18,19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5,7,8,18,19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 08 August 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicants' Amendment Under 37 C.F.R. §1.111 has been examined and remarks reviewed. The drawings and specification are amended. Claims 5, 7, 8, 18, 19, and 21 are pending.

1. Although Applicants' amendment is considered persuasive, Applicant's claims are not yet in an allowable condition. In this case, Examiner has restarted prosecution and accordingly this second non-final action on the merits issues.

Drawings

2. The replacement drawing sheet were received on 8 August 2003. These drawings are approved

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A Method for Reduced Power Consumption.

4. The disclosure is objected to because of the following informalities: In the specification, the acronym HDL does not stand for "hardware design language level". Although Applicants are free to be their own lexicographers, where, as here, Applicants apparently intend to use the term's plain and well-known meaning, the term should be accurately defined. *HDL* is an acronym that commonly stands for Hardware Description Language; but see Applicants' specification, page 5, line 12.

Appropriate correction is required.

Claim Objections

5. **Claims 5, 8, 18, 19, and 21** are objected to because of the following informalities: Pursuant to **claim 5**, at line 4, change "percycle" to - -per-cycle- -.; additionally lines 6-7 requires rephrasing; Further pursuant to claim 5, Applicants reference "the previous state" and "don't care state"; Not only does the phrase "the previous state" lack antecedent basis, but it has not been previously established that the control signals have states. Pursuant to **claim 8**, at line 2, the word *from* is misspelled. Pursuant to **claim 18**, lines 3-4 require rephrasing for clarity; additionally, line 4, contains an unattached "s". At line 5, "at a first function boundary", Applicants should state where the first function boundary exists (e.g. is it the first function boundary of the microprocessor? the template?). Additionally, pursuant to **claim 18**, "the updated microcode function block" lacks antecedent basis; "the one control signal" lacks antecedent basis; "the updated microcode function block" and "the control bit" lacks antecedent basis. Pursuant to **claim 19**, it is not only unclear what "true Os", "true Is" represent, but the "s" should be changed to 's'; at the last line "function" should be plural. Additionally, pursuant to claim 19, at line 13, chang "sill" to - -still- -; at line 20, capitalize Verilog. Pursuant to **claim 21**, "the control signal" and "the previous state" lacks antecedent basis. Additionally, at the last line, *signals* is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. **Claims 5, 7, 8, 18, 19 and 21** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject

Art Unit: 2825

matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants reference the term "test sweep" in the specification and the claims. However, Applicants' specification does not disclose a clear meaning of the term "test sweep". Apparently a *test sweep* is used to determine many things, but confusion still reigns regarding what a *test sweep* does; the definition of a *test sweep* and the scope of its application is unknown. A search of the prior art reveals that "test sweep" is not a common term in the art. Therefore, Applicants have the burden of clearly and adequately defining this term.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 5, 7, 8, 18, 19 and 21** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. Pursuant to **claim 5**, the relationship between control signals and new data is unclear. Pursuant to **claim 18**, the omitted structural cooperative relationships are between function types and microprocessor; it is unclear whether function types exist within the microprocessor; additionally, the relationship between the per-cycle basis updating and the template and the design specification is unclear; further the relationship between the first function boundary and the rest of the claim is unclear; still further, the relationship between the opcode group and the rest of the claim is undefined and hence unclear. Pursuant to **claim 19**,

Art Unit: 2825

although it is clear that Applicants are outlining method steps, the relationship between the various claim limitations is unclear, e.g. the relationship between a template and the per-bit basis; the relationship between the test sweep and the bit-to-bit interconnections; the relationship between function counts and function types; the relationship between full regression and debugging and the templates. Pursuant to **claim 21**, the relationship between control signals and new data is unclear. Claims dependent from the rejected base claims are likewise rejected.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please reference the PTO-892 for a complete listing.

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to A.M. Thompson whose telephone number is (703) 305-7441. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 5:00 p.m.. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew S. Smith, can be reached on (703) 308-1323.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956 or the Customer Service Center whose telephone number is (703) 306-3329.

11. Responses to this action should be mailed to:

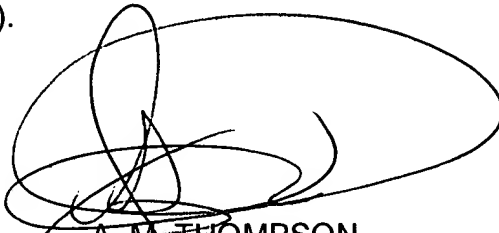
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

Art Unit: 2825

(703) 872-9306, (for all **OFFICIAL** communications intended for entry)

Hand-delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).



A. M. THOMPSON
Master's Level Patent Examiner